CONTENTS

Tectonophysics Volume 179

Special issue on Seismicity and Crustal Deformation (edited by E. Mantovani)

Preface VII

Active deformation and seismic potential in the Serbomacedonian zone, northern Greece
Voidomatis, Ph.S., Pavlides, S.B. (Thessaloniki, Greece) and Papadopoulos, G.A. (Attica and Athens, Greece) ... 1

Seismotectonics of the Northwest External Dinarides
Carulli, G.B., Nicolich, R., Rebez, A. and Slejko, D. (Trieste, Italy) 11

Intraplate seismicity: new seismotectonic data in Western Europe
Nicloas, M., Santoire, J.P. (Bruyères-le-Chatel, France) and Delpech, P.Y. (Villefrance-sur-Mer, France) 27

Correlation between seismicity and horizontal variation of heat flow density in Central Europe (extended abstract)
Stegenga, L. (Budapest, Hungary) 55

Deformation pattern in the central Mediterranean and behavior of the African / Adriatic promontory
Mantovani, E., Babbucci, D., Albarello, D. (Siena, Italy) and Mucciarelli. M. (Bergamo, Italy) 63

Geodynamic behaviour of eastern and western sides of Mount Etna
Gresta, S., Longo, V. and Viavattene, A. (Catania, Italy) 81

On the spreading of the East Pacific Rise
Marzocchi, W. and Mulargia, F. (Bologna, Italy) 93

Adriatic flexure and seismotectonics in southern Italy
Albarello, D. (Siena and Bologna, Italy), Mucciarelli, M. (Bergamo, Italy) and Mantovani, E. (Siena, Italy) 103

Stress relaxation at the lower dislocation edge of great shallow earthquakes
Dragoni, M. (Bologna, Italy) 113

Stress diffusion across laterally heterogeneous plates
Albarello, D. (Siena, Italy) and Bonafede, M. (Bologna, Italy) 121

Very slow-moving crustal strain disturbances
Bella, F., Biagi, P.F., Caputo, M., Della Monica, G., Ermini, A. (Rome, Italy), Manjgaladze, P. (Tbilisi, U.S.S.R.), Srigna, V. (Rome, Italy) and Zilpimiani, D. (Tbilisi, U.S.S.R.) 131

Finite element modeling of lateral viscosity heterogeneities and post-glacial rebound
Gasperini, P. and Sabadini, R. (Bologna, Italy) 141

Some rheological properties of the Earth's mantle
Mulargia, F., Quareni, F. and Enzo Boschi, E. (Bologna, Italy) 151

Research Papers

On the dip angle of subducting plates
Hsui, A.T. (Urbana, Ill., U.S.A.), Tang, X.-M. and Toksöz, M.N. (Cambridge, Mass., U.S.A.) 163

Results of measurements of the coda wave quality factor (Q_c) in north-central Alaska
McSweeney, T.J. and Biswas, N.N. (Fairbanks, Alaska, U.S.A.) 177

Fault systems and stress patterns on emerged oceanic ridges: a case study in Iceland
Bergerat, F., Angelier, J. and Villemin, T. (Paris, France) 183

$^{40}Ar/^{39}Ar$ mineral age record of a polyorogenic evolution within the Seve and Köli nappes, Trøndelag, Norway
Dallmeyer, R.D. (Athens, Ga., U.S.A.) 199

Microstructure and texture in lherzolites of the Balmuccia massif and their significance regarding the thermomechanical history
Skrotzki, W., Wedel, A., Weber, K. (Göttingen, F.R.G.) and Müller, W.F. (Darmstadt, F.R.G.) 227

A non-cylindrical model for the northwest Iberian alochthonous terranes and their equivalents in the Hercynian belt of Western Europe
Martínez-Catalán, J.R. (Salamanca, Spain) 253

Moment–magnitude scaling in the Aegean area
Main, I.G. (Edinburgh, U.K.) and Burton, P.W. (Norwich and Edinburgh, U.K.) 273

Devonian–Carboniferous paleopoles for Africa: consequences for Hercynian geodynamics
Aifa, T., Feinberg, H. and Pozzi, J.-P. (Paris, France) 287

The tectonic setting of the Bushveld Complex in Southern Africa, Part 1. Structural deformation and distribution
Du Plessis, C.P. and Walraven, F. (Pretoria, South Africa) 305

The upper boundary of the Philippine Sea plate beneath the western Kanto region estimated from S–P-converted wave
Iidaka, T., Mizoue, M., Nakamura, I., Tsukuda, T., Sakai, K., Kobayashi, M., Haneda, T. and Hashimoto, S. (Tokyo, Japan) 321
Earthquake rupture as a critical point: consequences for telluric precursors
Sornette, A. and Sornette, D. (Nice, France) 327
Fluid pressure transients on seismogenic normal faults
Parry, W.T. and Bruhn, R.L. (Salt Lake City, Utah, U.S.A.) 335
Fractal analysis of fractures in rocks: the Cantor's Dust method
Velde, B., Dubois, J. (Paris, France), Touchard, G. and Badri, A. (Poitiers, France) 345
Determination of early fold axis orientations in multiply deformed rocks using porphyroblast inclusion trails
Hayward, N. (Townsville, Qld., Australia) 353
Deformation and recrystallization mechanisms in naturally deformed sillimanites
Lambregts, P.J. and Van Roermund, H.L.M. (Utrecht, The Netherlands) 371

Discussion
Magnetic signatures of zones of fractures in igneous metamorphic rocks with an example from southeastern New England
– Comment
Singh, B. and Babu Rao, V. (Hyderabad, India) 379
– Reply
Frohlich, R. (Kingston, R.I., U.S.A.) 382